

ABSTRACT OF DISCLOSURE

038 The Automatic Furnace is a method and apparatus for maintaining a desired CO, NO, or temperature range at the flue of a multiburner furnace to increase efficiency and decrease pollution and includes delivering a second oxidant dosage to the burner while repeatedly sequencing through the plurality of sequential flue parameter doses beginning with the first flue parameter dose and proceeding to an adjacent flue parameter dose in the sequence after a predetermined time interval has elapsed. The second oxidant dosage is delivered until the flue parameter level attains the desirable range, at which point corresponding oxidant and flue parameter doses are selected from the plurality of sequential oxidant doses and flue parameter doses. The method also includes delivering the selected oxidant dose and flue parameter dose so as to maintain the desired flue parameter range.